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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,663	04/03/2000	Robert H. Adolfsen	MST-1980	4417

7590

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EXAMINER

GORDON, BRIAN R

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 08/27/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/541,663

Applicant(s)

ADOLFSEN ET AL. *AD*

Examiner

Brian R. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 0402.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52 and 55-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52, 55-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed June 4, 2002 have been fully considered but they are not persuasive. Applicant believes that the invention of the instant application is patentably distinct over the prior art of Kumar and Young. Applicant asserts that the structures and methods are not disclosed by the prior art and that Kumar exhibits the very shortcomings which the present invention seeks to overcome. Applicant also states that the prior art of Kumar if combined would not obtained the apparatus and method of the claims 1 and 28. Claims 1 and 28 have been canceled and therefore the limitations of those claims are not of issue. Claims 52 and 55-57 are presently pending. As to the shortcomings to which applicant intends to overcome, it is determined that these shortcomings have no bearing on the patentability of the claims. The specification points out these shortcomings to provide an understanding of the invention. However, the claims are interpreted in light of the specification and in considering the limitations of the claims, the examiner asserts that the prior art of Kumar does meet the limitations of the drafted claims. As to the apparatus claims, it is clear that the device of Kumar encompasses all of the limitations as recited in claim 55 and claims 56-57 recite the intended use of the device. The previous rejection of Paper No. 3 is hereby maintained for the reasons given above and below herein.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 52 and 55-57 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to the method of claim 52, it is unclear how the final air segment is adjusted before the first air segment, because it appears if the first segment would be adjusted first since it enters into the system first. It is also unclear how the adjustment of the segment takes place in the second conduit. It would appear that the adjustments takes place in the third conduit at the point where the valve is disposed.

It is unclear how the segments are adjusted according to a feedback loop. What information is used to determine the adjustment? How is the volume adjusted?

Claims 56-57 recite wherein clauses that do not further structurally limit the device of claim 55. The claims are moreso addressed to method steps.

It is unclear if applicant intends to claim the feedback loop of claim 57 as an element of the invention.

4. Claim 52 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the segments should be transferred to the third conduit before they are adjusted.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al.

Kumar et al. disclose an apparatus and a method for controlling a bi-directional flow stream of liquid packages including the steps required to aspirate multiple test packages. After the first test package is aspirated, the shear valve 130 is then driven by

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drive motor 132 to return to the aspirate position thereof, and sample liquid container 62 containing sample liquid S2 is indexed on transport device 66 by drive motor 68 into position for access by probe tube 42. Piston 34 of pump 31 is then driven by drive motor 36 to the operational bottom dead center position thereof, and probe assembly 40 concomitantly actuated as described relative to sample liquid container 62, and the respective buffer liquid B and reagent liquids R1 and R2 containers 60, 56 and 58, whereupon aspiration as described of a second sample liquid test package TP2 by pump 31 through probe tube 40 into conduit 50, and resultant displacement of the previously aspirated sample liquid test package TP1 from conduit 50 through shear valve 130 into conduit 38, are accomplished; thereby bringing the system 20 of our invention to the operational condition depicted in application drawing FIG. 9. As this occurs, pump 100 may again be cycled through one complete stroke, and pump 116 operated as required, for supply of further isolation liquid IL from isolation liquid reservoir 120 as heretofore described through shear valve 130 to the interior surface of the now connected, but still empty insofar as sample liquid test packages are concerned, analytical line 134.

Although Kumar et al. does not specifically recite the step of employing a means that adjusts the volume of the air segments to equal an optimal volume, it would have been obvious to one of the ordinary skill in the art to recognize that the pumps and valves of the system control the volume of the segments aspirated which allow the system to be placed in an operational condition.

As to the incorporation of a feedback loop, it is obvious that the controller 153 that is used to instruct, control, monitor, and synchronize the operations of the system may be programmed to operate on a basis of the output (feedback loop) of the analysis results as to control the aspiration of samples and shear valve motors.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is (703) 305-0399. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 305-7719 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

BRG  
August 26, 2002



**JAN LUDLOW**  
**PRIMARY EXAMINER**